

**MONTEREY BAY UNIFIED AIR POLLUTION CONTROL DISTRICT
TITLE V OPERATING PERMIT TV 54-01
EVALUATION REPORT**

24580 Silver Cloud Court
Monterey, CA 93940
Telephone: (831) 647-9411

Dated: May 15, 2009

APPLICATION RECEIVED FROM:

RMC Pacific Materials dba CEMEX
Davenport Plant
700 Highway One
Davenport, CA 95017

PLANT SITE LOCATION:

700 Highway One
Davenport, CA 95017

APPLICATION PROCESSED BY:

Mike Sewell, Air Quality Engineer

Nature of Business: Portland Cement Manufacturing

SIC Codes: 1222- Crushed and Broken Limestone
3241- Portland Cement Manufacturing

RESPONSIBLE OFFICIAL:

Name: Mr. Kenny O'Connell
Title: Plant Superintendent
Phone: (831) 458-5775
E-Mail: kenneth.oconnell@cemex.com

ALTERNATIVE RESPONSIBLE OFFICIAL:

Name: Mr. Yogi Towne
Title: Production Superintendent
Phone: (831) 458-5712
E-Mail: yogi.towne@cemex.com

FACILITY CONTACT PERSON:

Name: Mr. Chow Yip
Title: Process Engineer
Phone: (831) 458-5790
E-Mail: chow.yip@cemex.com

TABLE OF CONTENTS

PROJECT DESCRIPTION	3
FACILITY DESCRIPTION	3
EQUIPMENT DESCRIPTION	3
APPLICABLE FEDERAL REQUIREMENTS	8
COMPLIANCE DETERMINATION FOR APPLICABLE FEDERAL REQUIREMENTS	8
THE FOLLOWING WILL BE INCLUDED ON THE TITLE V PERMIT:	13
FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS	13
TESTING REQUIREMENTS AND PROCEDURES	17
MONITORING AND RECORD KEEPING REQUIREMENTS	20
REPORTING REQUIREMENTS	23
GENERAL CONDITIONS	25

PROJECT DESCRIPTION

The facilities' existing Title V permit (TV33-02) expired on February 28, 2009. This application is for renewal of this Title V Permit on the required five-year renewal cycle.

FACILITY DESCRIPTION

RMC Pacific Materials dba CEMEX operates a portland cement manufacturing facility in Davenport, California. This facility has been in operation since 1906. The facility utilizes a Preheater/Precalciner Type Cement Kiln.

Limestone and shale are quarried at the facility location. These quarried materials along with other purchased raw materials are ground, dried and supplied in the appropriate chemical proportions to the preheater/precalciner tower and then to the rotary kiln to produce clinker. The clinker is cooled, then finish ground with additives in accordance with the final product's desired properties. The finished product is sacked or stored in silos prior to bulk shipment by truck or railcar.

The CEMEX Davenport Plant is considered a federal Major Source and subject to the Title V permitting program due to the potential to emit Oxides of Nitrogen (NO_x), Oxides of Sulfur (SO_x), Carbon Monoxide (CO), and Particulate Matter less than 10 microns in diameter (PM₁₀).

EQUIPMENT DESCRIPTION

PORTLAND CEMENT MANUFACTURING FACILITY CONSISTING OF:

1. Quarry Operations

Mobile Rotary Drill Rigs, With Filter/Clone Dust Collection Systems.

Mobile Surface Mining Equipment, Mined Material To Primary Crushing & Screening.

Primary Crushing & Screening, Vented To Baghouse Dust Collectors, Sized Material To Quarry Silos And Fines To Fines Stockpile.

Quarry Silos, Discharging Materials To Raw Materials Stockpiles Via Overland Conveyor System, Transfer Points Equipped With Baghouse Dust Collectors.

2. Raw Materials Processing Circuit

Purchased Raw Materials Unloading And Storage, Three Sided Storage Enclosure, Enclosed Drive Over Hoppers With Materials Transferred Via Belt Conveyor To Enclosed Storage Or To Storage Bins, All Storage Bins Vented To Baghouse Dust Collectors. Iron Slag Received Utilizing Coal Receiving And Storage Equipment.

Raw Materials Retrieval, Raw Materials Transferred To Raw Materials Surge Bin From Stockpiles

And Storage Via Feeders And Raw Materials Feed Belt, Emission Points Vented To Baghouse Dust Collectors.

Raw Materials Mill, Raw Materials Transferred From Raw Materials Surge Bin To Roller Mill. Preheater And By-Pass Gases Combined And Vented Through Mill For Drying And Sweep Air. Mill Equipped With Double Cone Type Classifier Discharging To Main Electrostatic Precipitator (ESP).

Mill Booster Air Heater, 25 MMBTU/Hr Heat Input, Fired On Natural Gas Or On #2 Fuel Oil.

Homo Silos, Pneumatic Mixing Chamber Silo Systems, Receiving Raw Materials From the Main ESP Via Screw Conveyors, Drag Conveyors, Bucket Elevators, And Homo Feed Elevator, Emission Points Vented To Baghouse Dust Collectors.

Kiln Feed Surge Bin, Receiving Material From Homo Silos Via Airslides And Bucket Elevators, Emission Points Vented To Baghouse Dust Collectors.

Kiln Feed, Receiving Material From Kiln Feed Surge Bin Via Airslides And Discharging Material Via Airslide Into The Riser Of Stage II Suspension Preheater; Or The Iron Ore May Be Introduced Directly Into The Precalciner Riser Section Via Conveyors And Double Tipping Valve, Emission Points Vented To Baghouse Dust Collectors.

3. Coal Circuit

Coal Receiving And Storage, Enclosed 50 Ton Drive Over Railcar Receiving Hopper Transferring Coal Via Belt Feeder, Belt Conveyor, And Stacker To Coal Storage Pile. Emissions Controlled By Chemical Dust Suppression System With Spraybars At Each Transfer And Loadout Point, And By Baghouse Dust Collector With Pickup Points At Belt Feeder And Belt Conveyor Transfer Points. The Receiving System Is Also Used For Railcar Delivery Of Iron Ore, Gypsum, And Other Process Raw Materials.

Coal Reclaim, Transferring Coal To Coal Bin From Coal Storage Pile Via Underpile Vibrating Feeders, Pocket Belt Conveyor, Screen And Coal Belt. Emissions Controlled From Pocket Belt Transfer, Screen, Coal Belt And Coal Bin By Baghouse Dust Collector.

Coal Mill, Discharge From Coal Bin Via Weigh Feeder To CE Raymond Triple Gate Feeder Bowl Mill. Coal Mill Hot Air Obtained From Clinker Cooler Drop Out Box, With Two Ambient Air Bleed In Dampers For Temperature Control, For Coal Drying And Conveying Of Pulverized Coal Through The Mill. Mill Discharge To High Efficiency Cyclone Collector With Separated Material To Pulverized Coal Bin And Air Stream To Coal Mill Baghouse Dust Collectors.

Coal Feed, Coal Provided To Precalciner And Kiln From Pulverized Coal Bin Via Feed Screws And Feed Pumps Which Are Vented To Baghouse Dust Collectors.

4. Alkaline Slurry Preparation System, 150 Ton Lime Storage Silo Equipped For Pneumatic Delivery And Vented To Baghouse Dust Collector, Providing Lime Via Ball Mill And Vibrating Screen To 4000 Gallon Alkaline Slurry Tank. Alkaline Slurry Provided To Main Conditioning Tower And To Roller Mill For SO_x Control.

5. Cement Clinkering Process

Suspension Preheater With Precalciner:

Two First Stage Cyclones In Parallel, Each 15' 6" Diameter.

Second, Third, And Forth Stage Cyclones In Series, Each 22' 7" Diameter.

Precalciner, 41' High, 18' Diameter Cylindrical Section. Coal Introduced By Pneumatic Feed Pump, 250 MMBTU/Hr Maximum Heat Input. Number 2 Fuel Oil Standby. Gases Discharged From Rotary Kiln Vented Through Precalciner Providing Partial Combustion Air And Kiln Feed/Coal Mixing. Additional Combustion Air From Clinker Cooler.

Hauck 21 MMBTU/Hr Number 2 Oil Fired Precalciner Start-Up Burner.

Weishaupt 7.4 MMBTU/Hr Number 2 Oil Fired Precalciner Pilot Burner.

Conditioning Tower Between Discharge From First Stage Cyclones and Raw Mill Equipped With Alkaline Slurry Injection System For SO₂ Control.

Preheater Fan With 1600 Hp Motor Located Between Conditioning Tower And Raw Mill Prior To Combination With Bypass Duct.

Rotary Kiln:

13' Diameter By 183' 8" Long Rotary Kiln.

6" I.D. Straight Burner Pipe Used To Introduce Coal, 150 MMBTU/Hr Maximum Heat Input. Number 2 Fuel Oil Standby. Secondary Combustion Air From Clinker Cooler.

80 MMBTU/Hr Number 2 Oil Fired Kiln Start-Up Burner

Clinker Cooler:

Reciprocating Grate Cooler, With Eight Cooler Fans (Seven Online And One Backup).

Closed Loop Cooler Air Heat Exchange Circuit With Double Pass Air To Air Heat Exchanger, And Ten Module Gravel Bed Filter With Two 30 Hp Backflush Fans, 900 Hp Cooler Recirculation Fan With Bleed In Air Damper, And Discharging To The Intake Of Five Cooler Fans. Two Cooler Fans Have Atmospheric Intake Which Provides Secondary And Tertiary Combustion Air And Coal Mill Sweep Air To Closed Loop Cooler Air Heat Exchange Circuit.

Material Removed By Gravel Bed Filter And Heat Exchanger Drop Out Are Transferred To Clinker Circuit.

Clinker Breaker, 36" x 126" Hammermill With 50 Hp Motor.

12' x 80' Clinker Cooler Drag Conveyor.

Preheater Bypass Circuit:

Bypass Opening In Rotary Kiln Riser Duct Before Precalciner To Divert Kiln Gases To The Bypass Circuit For The Purpose Of Removing Particulate To Control Clinker Alkali Content.

150 Hp Quench Air Fan.

Mixing Chamber.

Bypass Conditioning Tower With Water Spray.

Environmental Elements Corporation Electrostatic Precipitator, Single Chamber With 34 Gas Passages On 10" Centers And 5 Fields, Each 9' In Length And 36' Field Height. Collected Material To Waste Dust Circuit.

900 Hp Bypass Precipitator I.D. Fan Discharging To Combine With Preheater Gases Downstream Of Preheater Fan And Before Raw Mill.

Main Electrostatic Precipitator (ESP)

Combined Preheater And Bypass Gases Passed Through Raw Mill Or Bypassing Raw Mill To Main ESP.

Environmental Elements Corporation Electrostatic Precipitator, Single Chamber With 58 Gas Passages On 10" Centers And 5 Fields, Each 9' In Length And 36' Field Height. Collected Material To Homo Silos.

3100 Hp Precipitator I.D. Fan With Discharge To 200 Foot Exhaust Stack.

Continuous Emission Monitoring System:

Lear Siegler Model RM-41 Transmissometer, Or Equivalent.

Lear Siegler Model SM-810, Measuring SO_x And NO_x, Or Equivalent.

Teledyne Hastings Model AFI-6KL Pitot Tube Flow Meter, Or Equivalent.

6. Clinker Circuit

Fringe Clinker Bin, 200 Ton, Receiving Clinker From Clinker Cooler Via Vibrating Feeder, Bucket Elevator, And Drag Conveyor. All Emission Points Vented To Baghouse Dust Collectors.

Clinker Storage Building, Receiving Clinker From Fringe Clinker Bin Via Conveyors And Bucket Elevators. All Emission Points Vented To Baghouse Dust Collectors.

Clinker Reclaim, Retrieval Of Clinker From Clinker Storage Building Via Underfloor Vibrating

Feeders, Conveyors And Bucket Elevators. All Emission Points Vented To Baghouse Dust Collectors.

Two Clinker Storage Bins, 450 Ton Each, Receiving Clinker From Clinker Reclaim. Clinker Bins Vented To Baghouse Dust Collectors.

7. Waste Dust Circuit

Dust Bin, 50 Ton, Receiving Waste Dust From The Bypass ESP And The Bypass Conditioning Tower. Dust Bin Vented To Baghouse Dust Collector.

Waste Dust Disposal, Discharge From Dust Bin To Truck Load Out Spout Via Screw Conveyor Or To Portable Storage Tanks Or To Pug Mill For Combination With Water Prior To Pumping To Slurry Pond. All Emission Points Vented To Baghouse Dust Collectors.

8. Cement Circuit

Gypsum/Limestone And Other Blending Materials Unloading And Storage, Materials Transferred To Gypsum/Limestone And Synthetic Gypsum Storage Bins Via Truck Unloading Hopper, Pocket Belt Conveyor And Bucket Elevator. All Emission Points Vented To Baghouse Dust Collectors.

Finish Mills, Two Aerofall Mills Limited Cement Grinding Ball Mills, Receiving Clinker From Clinker Storage Bins And Gypsum And/Or Limestone And/Or Other Blending Materials From Gypsum/Limestone/Synthetic Gypsum Storage Bins Via Separate Feeders And Finish Mill Feed Conveyor, Discharging To Surge Bin Via Air Separator And Cement Cooler Or Via Optional Cement Cooler Bypass Circuit Or Via Air Separator Bypass Circuit. Surge Bin Feeding Pneumatic Pump To Fringe Bin Or To Bulk Cement Silos. All Emission Points Vented To Baghouse Dust Collectors.

Bulk Cement Silos, Ten 80,300 Ft³ Capacity Silos, Receiving Cement From The Finish Mills Via Pneumatic Pumps. All Emission Points Vented To Baghouse Dust Collectors.

Bulk Loadout, Cement Transferred Pneumatically Or Via Bucket Elevators From Bulk Cement Silos To Eight Bulk Storage Tanks Prior To Truck/Railcar Loadout. All Emission Points Vented To Baghouse Dust Collectors.

9. Ancillary Equipment:

Abrasive Blasting Equipment.

Gasoline Dispensing Facility.

Laboratory Fume Hoods.

Portable Compressor.

Portable Generator.

Portable Material Screen.

APPLICABLE FEDERAL REQUIREMENTS

Rule 200 - Permits Required
Rule 201 - Sources Not Requiring Permits
Rule 207 - Review of New or Modified Sources
Rule 214 - Breakdown Condition
Rule 218 - Title V: Federal Operating Permits
Rule 300 - District Fees (Emission Statement - Section 4.4)
Rule 308 - Title V: Federal Operating Permit Fees
Rule 400 - Visible Emissions
Rule 403 - Particulate Matter
Rule 404 - Sulfur Compounds and Nitrogen Oxides
Rule 412 - Sulfur Content of Fuels
Rule 413 - Removal of Sulfur Compounds
Rule 416 - Solvents
Rule 417 - Storage of Organic Liquids
Rule 418 - Transfer of Gasoline into Stationary Storage Containers
Rule 426 - Architectural Coatings
Rule 433 - Organic Solvent Cleaning
Rule 1002 - Transfer of Gasoline into Vehicle Fuel Tanks
40 CFR Part 52 - Prevention of Significant Deterioration of Air Quality (PSD)
40 CFR Part 60, Subpart A - New Source Performance Standards, General Provisions
40 CFR Part 60, Subpart F - Standards of Performance for Portland Cement Plants
40 CFR Part 60, Subpart Y - Standards of Performance for Coal Preparation Plants
40 CFR Part 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants
40 CFR Part 63, Subpart A - National Emission Standard for Hazardous Air Pollutants, General Provisions
40 CFR Part 63, Subpart LLL - National Emission Standard for Hazardous Air Pollutants for Portland Cement Manufacturing
40 CFR Part 64 - Compliance Assurance Monitoring
40 CFR Part 68 - Risk Management Planning: Accidental Release Prevention (Section 112r)
40 CFR Part 82 - Protection of Stratospheric Ozone

COMPLIANCE DETERMINATION FOR APPLICABLE FEDERAL REQUIREMENTS

Rule 200 - Permits Required

This facility has historically complied with the requirements of this rule and continued compliance is expected.

Rule 201 - Sources Not Requiring Permits

This rule identifies which equipment is exempt from District permitting requirements.

Rule 207 - Review of New or Modified Sources

This facility started production in 1906. A modernization of the facility occurred in 1979, subjecting the facility to undergo significant NSR permitting. The conditions contained on these New Source Review (NSR) permits will be included on the Title V permit.

Rule 214 - Breakdown Condition

This rule specifies conditions and procedures for breakdowns. A condition which incorporates these requirements will be included on the permit.

Rule 218 - Title V: Federal Operating Permits

This is the implementing regulation by which the District issues the federal Operating Permits. All requirements imposed by this rule will be included on the Title V permit.

Rule 300 (Emission Statement - Section 4.4)

Historically, the facility has been in compliance with the requirement to submit an *Emission Statement*. A condition will be included on the permit to ensure continued compliance.

Rule 308 - Title V: Federal Operating Permit Fees

This is the District's fee rule for Title V. Appropriate conditions will be included on the Title V permit to ensure compliance with the fee provisions contained in this rule.

Rule 400 - Visible Emissions

This rule is applicable to the emissions from the facility.

The main ESP and all sources exhausting through baghouse dust collectors are assumed to be in compliance with the requirements of this rule. This is based upon the efficiency of properly designed control equipment and the issuance of the local District permits. Prior to permit issuance, District staff verified that the equipment was properly designed and in compliance with the opacity requirement of this rule. In addition, the annual compliance inspections for all permit units at the facility have shown the facility to be in compliance with the requirements of this rule and the data recorded by the transmissometer has shown the main stack (main ESP) exhaust stream to be in compliance.

Appropriate conditions will be included on the permit to ensure compliance with this rule.

Rule 403 - Particulate Matter

Rule 403 specifically exempts stationary internal combustion engines from its requirements. Therefore, with the exception of IC engines, the 0.15 grains per dry cubic foot emission standard is applicable to all stationary fuel fired equipment at the facility. In addition with the exception of IC engines, the 0.15 grains per dry cubic foot emission standard and the process weight standards are applicable to all point sources at the facility.

The main ESP and all sources exhausting through baghouse dust collectors are assumed to be in compliance with these rule requirements based upon the efficiency of a properly designed baghouse dust collectors and the issuance of the local District permits. Prior to permit issuance, District staff verified that the equipment was properly designed and in compliance with the grain loading and process weight requirements of this rule. In addition, source testing has show compliance with the rule requirements. Based upon the existing District permits, the fact that the process has not changed (no increase in grain loading to the EPA or the baghouse dust collectors) and the source testing data, this permit will only require particulate sampling of a particular baghouse dust collector and ESP

exhaust upon the observation of visual emissions from the baghouse dust collector or ESP except during periods of process breakdowns or upsets as allowed for and reported under District Rule 214.

Appropriate conditions will be included on the permit to ensure compliance with the requirements of this rule.

Rule 404 - Sulfur Compounds and Nitrogen Oxides

This rule is applicable to the emissions from ancillary equipment at the facility.

Based upon the requirements of the March 22, 2000 revision, no conditions from Rule 404 are applicable to the cement manufacturing process. This is due to the fact that the process is exempted from the requirements of this rule by the exemption contained in Section 1.3.2.

Internal Combustion Sources (Diesel Engines) - Compliance with the 0.2% by volume (2000 ppmv) limit for SO₂ is assumed due to the following calculation based upon the AP-42 emission factor of 0.29 Lbs SO₂/MMBtu heat input. Utilizing this emission factor and the F factor from EPA method 19, the SO₂ concentration for a diesel engine would equate to 186.6 ppmv $[(0.29 \text{ Lbs SO}_2/\text{MMBtu}) * ((\text{MM lbmoles air}) / (64.1 \text{ lbmole SO}_2)) * ((379 \text{ Ft}^3 \text{ Air}) / (\text{lbmole air})) / (9,190 \text{ SDCFM})] = 186.6 \text{ ppmv}$ This value is well below the 2000 ppmv SO₂ allowed in this rule. Therefore, no monitoring/testing or record keeping will be included on the permit to show compliance with the SO₂ limit for the diesel fired engines.

Compliance with the NO_x limit of 140 lb/hr from the diesel fired engines is assumed due to the following emission calculation based upon the AP-42 emission factors of 0.031 Lbs NO_x/Hp-hr. An emission rate of 140 Lbs/hr would equate to an engine of 4516 Hp $[(140 \text{ Lbs/hr}) / (0.031 \text{ Lbs NO}_x/\text{Hp-hr}) = 4516 \text{ Hp}]$. The largest diesel engine at the facility is 2,628 Bhp, and is not capable of exceeding the 140 lb hour NO_x limit. Therefore, no monitoring/testing or record keeping requirements will be included on the permit to show compliance with the 140 lb/hr NO_x limit for the diesel fired engines.

Compliance with the 0.2% by volume (2000 ppmv) limit for SO₂ for external combustion of natural gas is assumed due to the following calculation based upon the AP-42 emission factor of 0.6 lbs SO₂/MMCF combusted (Table 1.4-2 dated 1/95), which equates to 0.0006 lbs SO₂/MMBtu heat input. Utilizing this emission factor and the F factor from EPA method 19, the SO₂ concentration for external combustion of natural gas would equate to 0.41 ppmv $[(0.0006 \text{ lbs SO}_2/\text{MMBtu}) * ((\text{MM lbmoles air}) / (64.1 \text{ lbmole SO}_2)) * ((379 \text{ Ft}^3 \text{ Air}) / (\text{lbmole air})) / ((8,710 \text{ SDCFM}))] = 0.41 \text{ ppmv}$ This value is well below the 2000 ppmv SO₂ allowed in this rule. Therefore, no monitoring/testing or record keeping will be included on the permit to show compliance with the SO₂ limit for the external combustion of natural gas.

Rule 412 - Sulfur Content of Fuels

This rule which requires that the sulfur content of fuels combusted be less than 50 grains per 100 cubic feet for gaseous fuel and less than 0.5% by weight for liquid or solid fuel is applicable to this facility. Pipeline quality natural gas and standby LPG assures compliance with the 50 grain limit and the number 2 fuel oil is supplied to the facility with a sulfur content below 0.5%.

Appropriate conditions will be included on the permit to ensure compliance with the requirements of this rule.

Note that the combustion of coal in the kiln and precalciner is not subject to the requirements of this rule, as it is exempted from the requirements of Rule 412 by Rule 413 as discussed below.

Rule 413 - Removal of Sulfur Compounds

This rule provides that Rule 412 shall not apply where sulfur compounds are removed from combustion products, or a mixture of fuels are used such that the emission of sulfur compounds to the atmosphere are no greater than the emission if the source was combusting a liquid or solid fuel with a sulfur content less than 0.5% by weight.

The alkaline nature of cement provides for direct absorption of SO₂ into the product. In addition, the source utilizes an alkaline slurry injection system to reduce SO₂ emissions from the combustion of coal in the kiln and precalciner, and from the release of pyritic forms of sulfur found in the shale.

The PSD permit includes a specific limit of 250 pounds of SO₂/hour. The emission limit that would be imposed by Rule 413 would be 0.713 lbs SO₂/MMBtu [(0.5 lb Sulfur/100 lbs fuel)(1.0 lb fuel/14,030 Btu)(10⁶ BTU/MMBtu)(64 lbs SO₂/32 lbs Sulfur) = 0.713 lbs SO₂/MMBtu], which would equate to an emission level of 285.2 pounds per hour [(400 MMBtu/Hr)(0.713 lbs SO₂/MMBtu) = 285.2 lbs SO₂].

The 250 lbs SO₂/hour limit contained in the PSD permit is less than the 285.2 lbs SO₂/hour allowable in this Rule. Therefore, the requirements of Rule 413 are assured due to compliance with the PSD emission limit and will be subsumed under this permit condition.

Rule 418 - Transfer of Gasoline into Stationary Storage Containers

This rule requires that the gasoline storage tank have a submerged fill pipe and that Phase I Vapor recovery be utilized when filling the tank. The rule also requires specific record keeping regarding the quantity of fuel delivered to the facility. The facility is in compliance with the requirements of this rule.

Appropriate conditions will be included on the permit to ensure compliance with the requirements of this rule.

Rule 426 - Applications of Architectural Coatings

This rule is applicable to all applications of architectural coatings and limits the VOC content of these coatings. The facility is in compliance with the requirements of this rule.

An appropriate condition will be included on the permit to ensure compliance with the requirements of this rule.

Rule 433 - Organic Solvent Cleaning

This rule contains specific operational and record keeping requirements for solvent cleaning and degreasing operations.

Appropriate conditions will be included on the permit to ensure compliance with the provisions of this rule.

Rule 1002 - Transfer of Gasoline into Vehicle Fuel Tanks

This rule contains specific requirements for the installation and operation of ARB Certified Vapor Recover (phase II) systems on gasoline dispensing facilities.

The gasoline dispensing equipment was installed prior to the 11/23/94 adoption of Rule 1002, and therefore is not subject to the requirements of this rule.

40 CFR Part 52 - Prevention of Significant Deterioration of Air Quality (PSD)

The facility has undergone PSD review due to the modernization of the facility in 1979. The original PSD permit was issued by EPA in 1978 for the modernization of the facility. However, after the facility was constructed

according to the plans and specifications submitted to EPA, it became apparent that the estimates of certain emissions in the application for the modernized facility were erroneous, and that the facility was unable to achieve steady state compliance with the emission limits for NO_x and SO₂ stated in the permit. Therefore, the facility applied for a modification of the 1978 PSD permit in an August 19, 1986 submittal to EPA. EPA acted on this modification request and issued a revised PSD permit on July 31, 1991. The conditions contained on the July 31, 1991 PSD permit will be included on the Title V permit.

40 CFR Part 60, Subpart A - New Source Performance Standards, General Provisions

This facility is subject to the requirements of 60.7 (notification and record keeping), 60.8 (performance tests), 60.11 (compliance with standards and maintenance requirements), and 60.13 (monitoring requirements) because they are subject to 40 CFR Part 60, Subparts F and Y.

The District asserts that compliance with the conditions on the Title V permit shall be considered compliance with the monitoring, record keeping, and reporting requirements contained in 40 CFR Parts 60.7, 60.8 (with the exception of 60.8(b)), 60.11 (with the exception of 60.11(b) and 60.11(e)), and 60.13 (with the exception of 60.13(a), 60.13(d)(2), 60.13 (g), and 60.13(I)). The excepted sections are those for which the District has not received delegation (those which EPA will not delegate to States and Local Air Pollution Control Districts).

40 CFR Part 60, Subpart F - Standards of Performance for Portland Cement Plants

The facility is subject to the requirements of this part. These requirements were included on the PSD and NSR permits and will be included on this permit.

40 CFR Part 60, Subpart Y - Standards of Performance for Coal Preparation Plants

The facility is subject to the requirements of this part. These requirements were included on the PSD permit and will be included on this permit.

However, during the NSR permitting process the District established the more restrictive opacity standard (10%) from Subpart F for coal activities at the facility. Therefore, the 20% opacity standard from this part will be subsumed under the more restrictive 10% requirement from the NSR permit.

40 CFR Part 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants

The nonmetallic mineral processing at this facility predates the requirements of this part and has not undergone reconstruction (as defined in this part) or modification (as defined in 40 CFR §60.2) after August 31, 1983. Therefore this facility is not subject to the requirements of this part.

40 CFR Part 61, Subpart M - National Emission Standard for Asbestos

This facility on an as needed basis is subject to Section 61.145 through 61.147 - standards for the demolition and renovation of asbestos. Historically, the facility has been in compliance with the requirements of these standards. An appropriate condition will be included on the permit to ensure compliance with these requirements.

40 CFR Part 61, Subpart M - National Emission Standard for Asbestos

This facility on an as needed basis is subject to Section 61.145 through 61.147 - standards for the demolition and renovation of asbestos. Historically, the facility has been in compliance with the requirements of these standards. An appropriate condition will be included on the permit to ensure compliance with these requirements.

40 CFR Part 63, Subpart A - National Emission Standard for Hazardous Air Pollutants, General Provisions

This facility is subject to the requirements of this part due to the fact that the facility is subject to 40 CFR Part 63, Subpart LLL.

40 CFR Part 63, Subpart LLL - National Emission Standard for Portland Cement Manufacturing Industry

The facility is subject to the requirements of this standard. Appropriate conditions will be included on the permit.

40 CFR Part 64 - Compliance Assurance Monitoring

The cement kiln is subject to the requirements of this part due to its potential to emit particulate matter and the use of the Electrostatic Precipitator (ESP) to control these particulate emissions.

The ESP will be indirectly monitored for compliance with the PM emission limits by the use of a Continuous Opacity Monitor (COM). A COM fits the *presumptively acceptable* monitoring definition of 64.4(b)(2).

RMC has determined that opacity readings between 0 and 15 percent are the appropriate range for reasonable assurance of on-going compliance. The COM data will be averaged and recorded every 15 minutes by the plant's process control system.

An excursion will be defined as any 15-minute period where the main stack opacity is greater than 15 percent.

40 CFR Part 68 - Risk Management Planning: Accidental Release Prevention (Section 112r)

This facility is not presently subject to the requirements of this part. An appropriate condition will be included on the permit to ensure compliance with the requirements of this part if the facility were to become subject.

40 CFR Part 82 - Protection of Stratospheric Ozone

This facility is in compliance with the requirements of this part. An appropriate condition will be included on the permit to ensure compliance with these requirements.

THE FOLLOWING WILL BE INCLUDED ON THE TITLE V PERMIT:

FEDERALLY ENFORCEABLE EMISSION LIMITS AND STANDARDS

1. All equipment facilities, and systems installed or used to achieve compliance with the terms and conditions of this permit shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. [July 31, 1991 PSD Permit, District Rule 207]
2. RMC Pacific Materials dba CEMEX shall operate and maintain fabric dust collectors to control particulate emissions from the following areas of the facility [July 31, 1991 PSD Permit]:
 - a) Sand Bin 04-036
 - b) Iron Ore Bin 04-038

c)	Raw Material Transfer	04-005
d)	Roller Mill Surge Bin	05-100
e)	Coal Conveyor Transfer	06-321
f)	Kiln Feed & Homo Silos	07-481
g)	Kiln Feed System	07-423
h)	Clinker Handling	07-573
i)	Coal Bin	07-701
j)	Coal Processing	07-723
k)	Clinker & Gypsum Bins & Elevators	08-824
l)	Finish Mill Airslides & Elevators	08-870
m)	Air Separator	08-865
n)	Truck Load Out	(68, 69, 70, 71)

3. RMC Pacific Materials dba CEMEX shall operate and maintain pressure gauges on each compartment of each dust collector required under Condition 2 above. [July 31, 1991 PSD Permit]
4. RMC Pacific Materials dba CEMEX shall utilize and maintain an earthen berm and biological wind break for the active and inactive coal piles and a dust suppression system for the coal receiving, handling and storage areas. [July 31, 1991 PSD Permit and District Rule 207]
5. RMC Pacific Materials dba CEMEX shall utilize and maintain an alkaline slurry injection system (ASIS) for control of SO₂ emissions from the kiln. The slurry produced shall consist of at least 12 percent solids and shall consist of slaked lime or equivalent material which has been approved by the District. The ASIS shall be operated to the extent possible to maintain SO₂ emissions below 102.3 pounds per hour: [July 31, 1991 PSD Permit and District Rule 207]
 - a) at all times the raw mill is not operating except during kiln start-up, on which occasions the ASIS shall be operated as soon as the kiln feed rate reaches 100 tons per hour; and
 - b) at all times the SO₂ mass emission rate equals or exceeds 102.3 pounds sulfur dioxide per hour from the main stack, including during start-up.
6. RMC Pacific Materials dba CEMEX shall consume no more than 394 tons per day of coal on a daily maximum average and no more than 357 tons per day of coal on an annual average basis. [July 31, 1991 PSD Permit]
7. The sulfur content of the coal combusted shall not exceed 1.4% by weight on a weekly average or 1.25% by weight on an annual average. [July 31, 1991 PSD Permit And Rule 207]
8. Clinker production at the Davenport Cement Plant shall be limited to 7920 hours per year. [July 31, 1991 PSD Permit]
9. RMC Pacific Materials dba CEMEX shall not discharge or cause the discharge into the atmosphere from the main electrostatic precipitator stack: [July 31, 1991 PSD Permit, District Rule 207, And 40 CFR Part

63, Subpart LLL]

- a) particulate matter in excess of 0.30 pounds per ton of feed to the kiln, as measured using 40 CFR Part 60, Appendix A Reference Method 5;
 - b) particulate matter in excess of 40 lb/hr;
 - c) visible emissions which is as dark or darker than Ringelmann 1 or equivalent 20% opacity;
 - d) oxides of nitrogen (measured as NO₂) in excess of 250 pounds per hour on a running 24 hour average;
 - e) oxides of nitrogen (measured as NO₂) in excess of 350 pounds per hour on a running 2 hour average;
 - f) sulfur dioxide in excess of 250 lbs/hr on a running 24 hour average; and
 - g) sulfur dioxide in excess of 300 lbs/hr on a running 2 hour average.
10. RMC Pacific Materials dba CEMEX shall not discharge or cause the discharge into the atmosphere from the main electrostatic precipitator stack any gases which contain Dioxins and Furans (D/F) in excess of: [40 CFR Part 63, Subpart LLL]
- a) 0.20 ng per dscm (8.7×10^{-11} gr per dscf) (TEQ) corrected to 7 percent oxygen; or
 - b) 0.40 ng per dscm (1.7×10^{-10} gr per dscf) (TEQ) corrected to 7 percent oxygen, when the average temperature at the inlet to the particulate matter control device is 204 °C (400 °F) or less.
11. RMC Pacific Materials dba CEMEX shall limit their shale usage to the lower sulfur content “tan” shale at all times the sulfur dioxide emissions from the main stack exceed 91.9 pounds per hour. Tan shale shall be defined as that identified by RMC Pacific Materials dba CEMEX to have an average SO₃ content of 0.37 percent with a standard deviation of 0.67 percent. [District Rule 207]
12. No air contaminant shall be discharged into the atmosphere from any quarry operations prior to the raw material storage areas for a period or periods aggregating more than three (3) minutes in any one (1) hour which is as dark or darker than Ringelmann 1 or equivalent 20% opacity. [District Rule 400]
13. Visible emissions from any process equipment, dust collector, or storage area, except the main stack and those specified in Condition 12 shall not exceed the following criteria: [July 31, 1991 PSD Permit, District Rule 400, And 40 CFR Part 63, Subpart LLL]
- a) 10 percent opacity or greater, as determined by averaging 24 consecutive observations, made at 15 second intervals; and
 - b) 20 percent opacity or greater for any period or periods aggregating more than 3 minutes in any one hour.

14. Materials collected in the baghouse dust collectors must be discharged only into closed containers. [District Rule 207]
15. The coal and raw material storage piles shall be shaped so as to minimize exposure to the wind, and to minimize dust entrainment. [District Rule 207]
16. Particulate matter from the coal mill baghouse dust collector shall not exceed 0.031 grains per standard dry cubic foot. [40 CFR Part 60, Subpart Y]
17. Particulate matter shall not exceed 0.15 grains per standard dry cubic foot in any exhaust stream. [District Rule 403]
18. Particulate matter from any exhaust stream shall not exceed the lesser of 40 pounds per hour or the pound per hour limit established by the following mass emission limit equation [District Rule 403]:

$$E = 4.10 P^{0.67}$$

where:

E = rate of emission in pounds per hour

P = process weight rate in tons per hour

19. The sulfur content on any fuel oil used at the facility shall not exceed 0.5 percent by weight. [District Rule 412]
20. The sulfur content on any gaseous fuel used at the facility shall not contain sulfur compounds, calculated as hydrogen sulfide at standard conditions, in excess of 50 grains per 100 cubic feet. [District Rule 412]
21. RMC Pacific Materials dba CEMEX' gasoline storage tanks shall be equipped with permanent submerged fill pipes. [District Rule 418]
22. RMC Pacific Materials dba CEMEX shall prevent the emission of 95 percent by weight of the gasoline vapors displaced during the filling of the storage tanks at the gasoline dispensing facility by the use of Phase I Vapor Recovery. [District Rule 418]
23. RMC Pacific Materials dba CEMEX shall limit emissions of volatile organic compounds from the use of architectural coatings pursuant to the requirements of District Rule 426. [District Rule 426]
24. RMC Pacific Materials dba CEMEX shall limit emissions of volatile organic compounds during solvent cleaning and degreasing operations pursuant to the requirements of District Rule 433. [District Rule 433]

25. RMC Pacific Materials dba CEMEX shall operate the in-line kiln/raw mill, such that: [40 CFR Part 63, Subpart LLL]
 - a) When the raw mill is operating, the temperature limit established during the performance test required by Condition 35 at the inlet to the main ESP when the raw mill was operating is not exceeded.
 - b) When the raw mill is not operating, the temperature limit established during the performance test required by Condition 35 at the inlet to the main ESP when the raw mill was not operating, is not exceeded.
26. RMC Pacific Materials dba CEMEX shall have in place a District approved operations and maintenance plan for all equipment subject to the requirements of 40 CFR Part 63, Subpart LLL. This plan shall include all items required by 40 CFR §63.1350(a) and 40 CFR §63.6(e)(3). Failure to comply with any provisions of this operations and maintenance plan shall be a violation of the standard. [40 CFR Part 63, Subpart LLL]
27. RMC Pacific Materials dba CEMEX shall conduct an inspection of the components of the combustion system of the in-line kiln/raw mill at least once per year. [40 CFR Part 63, Subpart LLL]
28. RMC Pacific Materials dba CEMEX is required to repeat the performance tests required by Conditions 34 and 35 within 90 days of initiating any significant change in the feed or the fuel used in the previous performance test. [40 CFR Part 63, Subpart LLL]
29. Upon detection of an excursion as defined in condition 50, RMC Pacific Materials dba CEMEX shall restore the ESP to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. [40 CFR Part 64]
30. RMC Pacific Materials dba CEMEX shall submit a Compliance Assurance Monitoring Quality Improvement Plan (QIP) to the District as specified in 40 CFR §64.8 if the accumulation of excursions monitored under condition 50 exceed 5 percent of the ESP's operating time for a reporting period. [40 CFR Part 64]
31. Should the facility, as defined in 40 CFR §68.3 become subject to Part 68, then RMC Pacific Materials dba CEMEX shall submit a risk management plan (RMP) by the date specified in 40 CFR §68.10. Once subject to Part 68, RMC Pacific Materials dba CEMEX shall certify compliance with these requirements as part of the annual compliance certification required by 40 CFR Part 70 and this permit. [40 CFR Part 68]
32. RMC Pacific Materials dba CEMEX shall comply with the requirements of 40 CFR Part 82 - Protection of Stratospheric Ozone. [40 CFR Part 82]

TESTING REQUIREMENTS AND PROCEDURES

33. RMC Pacific Materials dba CEMEX shall conduct testing weekly, in accordance with the current ASTM Standard Method D3177 or equivalent method approved by EPA to verify compliance with Condition 7. [July 31, 1991 PSD Permit]
34. RMC Pacific Materials dba CEMEX shall conduct testing semi-annually and at other times as specified by EPA, in accordance with the methodology contained in EPA Methods 1-7 (or equivalent) to verify compliance with the emission limits contained in Condition 9(a) and (b), and to verify the accuracy of the continuous in-stack monitoring instrumentation. The District and EPA shall be notified at least 30 days in advance of the testing to allow an observer to be present and the report of results shall be transmitted to the District as soon as they are available. Based on the development of an emissions history, the District may allow a reduction in the frequency of emission testing to one test per year. [July 31, 1991 PSD Permit and District Rule 207]
35. No later than December 6, 2002 for the initial test and every 30 months thereafter, RMC Pacific Materials dba CEMEX shall conduct testing in accordance with the methodology contained in EPA Method 23 to verify compliance with the emission limits contained in Condition 10. RMC Pacific Materials dba CEMEX shall demonstrate compliance by conducting separate performance tests while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. [40 CFR Part 63, Subpart LLL]
- a) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the equipment is operating at the highest load or capacity level reasonably expected to occur. The duration of each run shall be at least three hours and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.
 - b) The temperature of the exhaust gases from the in-line kiln/raw mill at the inlet to the main ESP must be continuously recorded during the period of the Method 23 test, and the continuous temperature records must be included in the performance test report.
 - c) One-minute average temperatures must be calculated for each minute of each run of the test.
 - d) The run average temperature must be calculated for each run, and the average of the run temperatures must be determined and included in the performance test report and will determine the applicable temperature limit for Condition 25.
36. RMC Pacific Materials dba CEMEX shall conduct testing semi-annually, in accordance with the methodology contained in EPA Method 22 for all non-point sources. This testing will be the basis for determining compliance with Conditions 12 and 13.

If no emissions are observed utilizing Method 22, the non-point source shall be deemed to be in compliance with condition 12 and 13.

If emissions are observed from any non-point sources and that non-point source is not operating under breakdown condition as defined in and allowed for in District Rule 214, RMC Pacific Materials dba CEMEX shall conduct testing on that non-point source within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with Condition 13(a) and the methodology contained

in EPA Method 9 and the averaging/aggregating period contained in District Rule 400 to verify compliance with Conditions 12 and 13(b) for that non-point source. [District Rule 218]

37. RMC Pacific Materials dba CEMEX shall conduct testing monthly, in accordance with the methodology contained in EPA Method 22 (with the exception that the observation period shall be one minute) for all point sources with the exception of the finish mill sweep and air separator bag houses. This testing will be the basis for determining compliance with Conditions 12, 13, 16, 17 and 18. [District Rule 218 and 40 CFR Part 63, Subpart LLL]

If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with Conditions 12, 13, 16, 17 and 18.

If no visible emissions are observed in six consecutive monthly tests for any point source, RMC Pacific Materials dba CEMEX may decrease the frequency of testing from monthly to semi-annually for that point source. If visible emissions are observed during any semi-annual test, RMC Pacific Materials dba CEMEX must resume testing that point source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

If no visible emissions are observed during the semi-annual test for any point source, RMC Pacific Materials dba CEMEX may decrease the frequency of testing from semi-annually to annually for that point source. If visible emissions are observed during any annual test, RMC Pacific Materials dba CEMEX must resume testing that point source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.

If emissions are observed from any point source and that point source is not operating under breakdown condition as defined in and allowed for in District Rule 214, RMC Pacific Materials dba CEMEX shall conduct testing on that point source:

- 1) within one hour of the Method 22 testing in accordance with EPA Method 9 to verify compliance with Condition 13(a) and with the methodology contained in EPA Method 9 and the averaging/aggregating period contained in District Rule 400 to verify compliance with Conditions 12 and 13(b); and
 - 2) within 30 days of the Method 22 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of Conditions 16, 17 and 18.
38. RMC Pacific Materials dba CEMEX shall conduct testing daily, in accordance with the methodology contained in EPA Method 22 for the finish mill sweep and air separator bag houses. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonable expected to occur within the day. This testing will be the basis for determining compliance with Conditions 12, 13, 16, 17 and 18. [District Rule 218 and 40 CFR Part 63, Subpart LLL]

If no emissions are observed utilizing Method 22, the point source shall be deemed to be in compliance with Conditions 12, 13, 16, 17 and 18.

If emissions are observed from the finish mill sweep and air separator bag houses and that source is not operating under breakdown condition as defined in and allowed for in District Rule 214, RMC Pacific Materials dba CEMEX shall conduct testing on that source:

- 1) within one-hour, the corrective actions specified in the site specific operating and maintenance plan developed in accordance with Condition 26; and
 - 2) within 24 hours of the Method 22 testing in accordance with EPA Method 9 to verify compliance with Condition 13(a) and with the methodology contained in EPA Method 9 and the averaging/aggregating period contained in District Rule 400 to verify compliance with Conditions 12 and 13(b). The duration of the Method 9 test shall be thirty minutes; and
 - 3) within 30 days of the Method 22 testing in accordance with EPA Method 5 or 5D to verify compliance with the requirements of Conditions 16, 17 and 18.
39. No testing is specified for the (Rule 412) fuel sulfur content limit in Condition 19 as compliance with this condition will be verified by the fuel sulfur content reports to be provided by the fuel supplier. If testing is conducted for Condition 19, RMC Pacific Materials dba CEMEX should conduct testing in accordance with ASTM D1552-83, ASTM D1266-87 or ASTM D2622-87. [District Rule 218]
40. No testing is specified for the sulfur content of gaseous fuels as long as the only gaseous fuel fired is pipeline quality natural gas. If the facility fires other gaseous fuels, RMC Pacific Materials dba CEMEX shall maintain fuel sulfur content reports to be provided by the fuel supplier or shall conduct testing of all gaseous fuel deliveries in accordance with ASTM D 1072-80, ASTM D 3031-81, ASTM D 3246-81 or SCAQMD Method 307-91 to verify compliance with Condition 20.

MONITORING AND RECORD KEEPING REQUIREMENTS

41. RMC Pacific Materials dba CEMEX shall maintain on file the following information for each day of operation and shall make the data available to the District upon request: [District Rule 207]
- a) maximum 24 hour average NO_x emission rate, pounds NO_x per hour;
 - b) maximum 2 hour average NO_x emission rate, pounds NO_x per hour, occurring during the 24 hour period of 8:00am to 8:00am;
 - c) maximum 24 hour average SO₂ emission rate, pounds SO₂ per hour;
 - d) maximum 2 hour average SO₂ emission rate, pounds SO₂ per hour, occurring during the 24 hour period of 8:00am to 8:00am;
 - e) daily average SO₃ percent in kiln feed;
 - f) average daily kiln feed rate, tons per hour;
 - g) hours of daily kiln operation, hours;
 - h) hours of daily raw mill operation, hour; and
 - i) hours of daily Alkaline Slurry Injection System operation.

42. RMC Pacific Materials dba CEMEX shall monitor and record the flow rate in gallons per minute, of slurry and water used in the ASIS on a continuous basis, and shall determine the percent solids in the slurry on a daily basis to verify compliance with Condition 5 and shall make these records available to the District upon request. [District Rule 207]
43. RMC Pacific Materials dba CEMEX shall maintain permanent records of the quantity of coal combusted to verify compliance with Condition 6. These records shall be made available, upon request, to the District, the ARB, and the EPA. [July 31, 1991 PSD Permit]
44. RMC Pacific Materials dba CEMEX shall maintain permanent records of the sulfur content of the coal combusted to verify compliance with the requirements of Condition 7. These records and the testing required by Condition 32 shall be made available, upon request, to the District, the ARB, and the EPA. [July 31, 1991 PSD Permit]
45. RMC Pacific Materials dba CEMEX shall maintain and operate the following continuous emissions monitoring (CEM) systems in the main stack: [July 31, 1991 PSD Permit, District Rule 207, and 40 CFR Part 63, Subpart LLL for the COM]
 - a) A system to measure SO₂ and NO_x concentrations. The system shall meet EPA monitoring performance specifications (40 CFR 60.13 and 40 CFR Part 60 Appendix B, Performance Specifications 2, 3, and 4).
 - b) A system to measure volumetric flow rate. The system shall meet EPA performance specifications (40 CFR Part 52, Appendix E).
 - c) A transmissometer system for continuous measurement of opacity. The system shall meet EPA monitoring performance specifications (40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 1).
46. RMC Pacific Materials dba CEMEX shall maintain a system for monitoring compliance with the emission limits specified in Condition 9(c) through (f), using the data from the in-stack monitoring instrumentation. Excess emissions indicated by the CEM system shall be considered violations of the applicable emission limit for the purposes of this permit. [July 31, 1991 PSD and District Rule 207]
47. RMC Pacific Materials dba CEMEX shall maintain records showing the quantity of all gasoline delivered to the gasoline storage tanks. [District Rule 418]
48. RMC Pacific Materials dba CEMEX shall maintain a monthly log of the facility-wide total volume of make-up solvent used, and waste solvent disposed of or recycled, for all cleaning devices using volatile organic compounds for solvent cleaning and degreasing. [District Rule 433]

The record keeping provisions of this condition do not apply to remote reservoir cold cleaners which are serviced by an independent contractor. For such remote cold cleaners, evidence of service shall be maintained.

49. RMC Pacific Materials dba CEMEX shall monitor D/F emissions in accordance with the following: [40 CFR Part 63, Subpart LLL]
- a) RMC Pacific Materials dba CEMEX shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the in-line kiln/raw mill at the inlet to, or upstream of, the main ESP.
 - i) The recorder response range must include zero and 1.5 times the average temperatures established according to the requirements of Condition 35.
 - ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternative reference, subject to approval by the District.
 - b) RMC Pacific Materials dba CEMEX shall monitor and continuously record the temperature of the exhaust gases from the in-line kiln/raw mill at the inlet to the main ESP.
 - c) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
 - d) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute is added to the previous 179 values to calculate the three-hour rolling average.
 - e) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.
 - f) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.
50. RMC Pacific Materials dba CEMEX shall maintain the following compliance assurance monitoring as specified below [40 CFR Part 64]:
- a) The opacity of the main electrostatic precipitator (ESP) exhaust shall be monitored and recorded at least once every 15 minutes when the ESP is operational. An excursion from the monitoring parameter is defined as any recorded reading being greater than 15 percent opacity. A continuous opacity monitor (COM) will be utilized for the monitoring with the collected data averaged over a 15-minute period.
51. As applicable RMC Pacific Materials dba CEMEX shall maintain the following general records of required monitoring information [July 31, 1991 PSD Permit and District Rule 218]:
- a) the date and time of sampling or measurements;
 - b) the date(s) analyses were performed;
 - c) the company or entity that performed the analyses;
 - d) the analytical techniques or methods used;
 - e) the results of such analyses;

- f) the operating conditions existing at the time of sampling or measurement; and
 - g) the records of quality assurance for continuous monitoring systems (including, but not limited to quality control activities, audits, and calibration drift checks) and source testing methods.
- 52. RMC Pacific Materials dba CEMEX shall maintain records on the occurrence and duration of any startup or shutdown resulting from a malfunction in the operation of the control equipment under this permit. [District Rule 218]
- 53. RMC Pacific Materials dba CEMEX shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring, sample collection, measurement, report, and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [District Rule 218]

REPORTING REQUIREMENTS

- 54. RMC Pacific Materials dba CEMEX shall notify the EPA Regional Administrator by telephone within 48 hours following any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any allowable mass emissions limit stated in this permit. In addition, the EPA Regional Administrator shall be notified in writing within fifteen (15) days of any such failure. This notification shall include a description of the malfunctioning equipment or abnormal operation, the date of the initial failure, the period of time over which emissions were increased due to the failure, the cause of the failure, the estimated resultant emissions in excess of those allowed in this permit, and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause. [July 31, 1991 PSD Permit]
- 55. RMC Pacific Materials dba CEMEX shall orally notify the District as soon as it learns that the emissions from the main stack equal or exceed the emission limits set forth in Condition 9. Such notification shall be followed within 5 days follow the conclusion of the event by a written report specifying the duration of the event, maximum and average emission levels during the event, and the cause and remedy. [District Rule 207]
- 56. RMC Pacific Materials dba CEMEX shall submit a written report of all excess emissions to EPA (Attn: A-3-3) for every calendar quarter. The report shall include the following: [July 31, 1991 PSD Permit]
 - a) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each time period of excess emissions.
 - b) Specific identification of each period of excess emissions that occurs during start-ups, shutdowns, and malfunctions of the kiln system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted shall also be reported.

- c) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs and adjustments.
- d) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report.

57. RMC Pacific Materials dba CEMEX shall report all breakdowns which results in the inability to comply with any emission standard or requirement contained on this permit to the Air Pollution Control Officer (APCO) within 1 hour of the occurrence, this one hour period may be extended up to six hours for good cause by the APCO. The APCO may elect to take no enforcement action if RMC Pacific Materials dba CEMEX demonstrates to the APCO's satisfaction that a breakdown condition exists.

The estimated time for repair of the breakdown shall be supplied to the APCO within 24 hours of the occurrence and a written report shall be supplied to the APCO with 5 days after the occurrence has been corrected. This report shall include at a minimum [District Rule 214]:

- a) a statement that the condition or failure has been corrected and the date of correction; and
- b) a description of the reasons for the occurrence; and
- c) a description of the corrective measures undertaken and/or to be undertaken to avoid such an occurrence in the future; and
- d) an estimate of the emissions caused by the condition or failure.

58. Any time an action taken by RMC Pacific Materials dba CEMEX during a startup, shutdown or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures specified in the plan required by Condition 26, RMC Pacific Materials dba CEMEX shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile transmission. The immediate report shall be followed by a letter, certified by the responsible official, explaining the circumstances of the event, the reasons for not following the plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred. [40 CFR Part 63, Subpart LLL]

59. RMC Pacific Materials dba CEMEX shall submit semiannual monitoring reports to the District, in a District approved format, no later than August 15 for the period of January 1 through June 30 and no later than February 15 for the period of July 1 through December 31. [District Rule 218]

These monitoring reports shall include at a minimum:

- a) the time intervals, date and magnitude of excess emissions, nature and cause of the excess (if known), corrective actions and preventative measures adopted; and
- b) the averaging period used for data reporting corresponding to the averaging period specified in the emission test period used to determine compliance with an emission standard for the pollutant in question; and

- c) all information pertaining to any monitoring as required by the permit; and
- d) a negative declaration specifying when no excess emissions occurred.

60. RMC Pacific Materials dba CEMEX shall submit semiannual summary reports to the District no later than August 15 for the period of January 1 through June 30 and no later than February 15 for the period of July 1 through December 31. [40 CFR Part 63, Subpart LLL]

These summary reports shall include at a minimum:

- a) all exceedances of the maximum control device inlet gas temperature limits as specified in Condition 25; and
- b) all failures to calibrate thermocouples and other temperature sensors as required by Condition 49(a); and
- c) the results of the combustion system component inspections conducted during the reporting period as required by Condition 27; and
- d) all failures to comply with any provision of the operation and maintenance plan required by Condition 26.

61. RMC Pacific Materials dba CEMEX shall submit an annual compliance certification report to the District and U.S. EPA, in a District approved format, no later than February 15 for the period of January 1 through December 31 of the preceding year. [District Rule 218]

This report shall include a written statement from the responsible official which certifies the truth, accuracy, and completeness of the report and shall include at a minimum:

- a) identification of each term or condition of the permit that is the basis of the certification; and
- b) the compliance status; and
- c) whether compliance was continuous or intermittent; and
- d) the method(s) used for determining the compliance status of the source, currently and over the reporting period.

GENERAL CONDITIONS

62. RMC Pacific Materials dba CEMEX shall comply with all conditions of this federal operating permit. Any noncompliance with a permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. [District Rule 218]

63. In an enforcement action, the fact that RMC Pacific Materials dba CEMEX would have to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit is not a defense. [District Rule 218]
64. This permit may be modified, revoked, reopened and reissued, or terminated for cause as determined by the District. The filing of a request by RMC Pacific Materials dba CEMEX for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [District Rule 218]
65. This permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. [District Rule 218]
66. RMC Pacific Materials dba CEMEX shall furnish to the District, within a reasonable time, any information that the District may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. Upon request, RMC Pacific Materials dba CEMEX shall also furnish to the District copies of records required to be retained by this permit. [District Rule 218]
67. For applicable requirements that will become effective during the permit term, RMC Pacific Materials dba CEMEX shall meet such requirements on a timely basis unless a more detailed schedule is expressly required by the applicable requirement. [District Rule 218]
68. Any document submitted to the District pursuant to this permit shall contain certification by the responsible official of truth, accuracy and completeness. All certifications shall state that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. RMC Pacific Materials dba CEMEX shall promptly, upon discovery, report to the District a material error or omission in these records, reports, plans, or other documents. [District Rule 218]
69. RMC Pacific Materials dba CEMEX shall report any violation of any requirement contained in this permit to the District within 96 hours after such occurrence. The violation report shall include the time intervals, date and magnitude of excess emissions; nature and cause of the excess (if known), corrective actions and preventive measures adopted. [District Rule 218]
70. Upon any administrative or judicial challenge, all the emission limits, specific and general conditions, monitoring, record keeping, and reporting requirements of this permit, except those being challenged, remain valid and must be complied with. [District Rule 218]
71. For this federal operating permit to remain valid through the permit term of five years from the date of issuance, RMC Pacific Materials dba CEMEX shall pay an annual emission fee based upon the requirements of District Rule 308. [District Rule 218]

72. RMC Pacific Materials dba CEMEX shall have available at the facility at all times a copy of this federal operating permit. [District Rule 218]
73. For protection from enforcement action based upon an emergency, as defined in District Rule 218, the responsible official for RMC Pacific Materials dba CEMEX shall submit to the District relevant evidence which demonstrates [District Rule 218]:
- a) an emergency occurred; and
 - b) that RMC Pacific Materials dba CEMEX can identify the cause(s) of the emergency; and
 - c) that the facility was being properly operated at the time of the emergency; and
 - d) that all steps were taken to minimize the emissions resulting from the emergency; and
 - e) within two working days of the emergency event, RMC Pacific Materials dba CEMEX provided the District with a description of the emergency and any mitigating or corrective actions taken.
74. Upon presentation of credentials, RMC Pacific Materials dba CEMEX shall allow the District, the ARB, the EPA, or an authorized representative, to perform the following [District Rule 218]:
- a) enter upon the premises where the federal operating permit source is located or in which any records are required to be kept under the terms and conditions of this federal operating permit;
 - b) to have access to and copy any records required to be kept under the terms and conditions of this federal operating permit;
 - c) to inspect any equipment, operation, or process described or required in this federal operating permit; and,
 - d) to sample emissions from the source.
